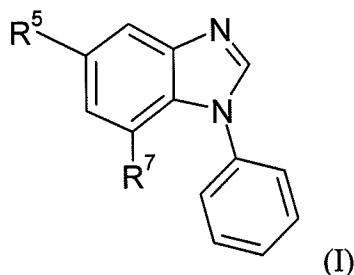


**AMENDED CLAIM SET:**

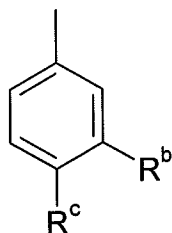
1. (original) A compound of general formula (I):



or an N-oxide thereof, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof, wherein

$R^5$  is halo, trifluoromethyl, trifluoromethoxy, cyano, nitro, alkyl, alkoxy, -alkyl-OR<sup>a</sup>, -CH=N-O-R<sup>a</sup> or -(C=O)-O-alkyl; wherein R<sup>a</sup> is hydrogen or alkyl;

$R^7$  is



wherein one of R<sup>b</sup> and R<sup>c</sup> is hydrogen; and the other of R<sup>b</sup> and R<sup>c</sup> is

- hydrogen, halo, cyano, hydroxy, nitro, trifluoromethyl, trifluoromethoxy, alkyl, alkoxy, alkylcarbonyl or -NR<sup>d</sup>-(C=O)-R<sup>e</sup>; wherein the alkyl and alkoxy are optionally substituted with one or more substituents selected from the group consisting of: hydroxy, alkoxy, halo, and -NR'R''; R<sup>d</sup> and R<sup>e</sup> independently of each other are selected from hydrogen and alkyl; R' and R'' independently of each other are selected from hydrogen and alkyl;

- $-NR^fR^g$ ,  $-alkyl-NR^fR^g$ ,  $-(C=O)-NR^fR^g$ ,  $-O-NR^fR^g$ ,  $-O-alkyl-NR^fR^g$ ,  $-NR^h-alkyl-NR^fR^g$ ; wherein  $R^h$  is hydrogen or alkyl;  $R^f$  and  $R^g$  independently of each other are hydrogen or alkyl; or  $R^f$  and  $R^g$  together with the nitrogen to which they are attached form a 5- to 7-membered heterocyclic ring, which heterocyclic ring may optionally comprise as a ring member, one oxygen atom, and/or one additional nitrogen atom, and/or one carbon-carbon double bond, and/or one carbon-nitrogen bond; and which heterocyclic ring may optionally be substituted with trifluoromethyl, alkyl, hydroxyalkyl, or  $-NR'R''$ ; wherein  $R'$  and  $R''$  independently of each other are hydrogen or alkyl; or  $R^b$  and  $R^c$  together represent  $-O-CH_2-O-$ ;

or  $R^7$  is

- $-NR^h-(C=O)-R^i$ ,  $-N=CH-R^i$ , or  $-C\equiv C-R^i$ ; wherein  $R^h$  is hydrogen or alkyl; and  $R^i$  is alkyl or phenyl, which alkyl or phenyl is optionally substituted with hydroxy, trifluoromethyl, cyano or alkyl; or
- $-NR^jR^k$ ,  $-alkyl-NR^jR^k$ ,  $-CH=CH-(C=O)-NR^jR^k$ ,  $-CH=CH-(C=O)-O-alkyl$ ,  $-alkyl-(C=O)-NR^jR^k$ , or  $-C\equiv C-CH_2-NR^jR^k$ ; wherein  $R^j$  and  $R^k$  independently of each other are selected from the group consisting of hydrogen, alkyl,  $-alkyl-CN$ ,  $-alkyl-R'R''$  and  $-alkyl-R^l$ ; wherein  $R'$  and  $R''$  independently of each other are hydrogen or alkyl;  $R^l$  is a 5- to 7-membered heterocyclic ring comprising one nitrogen atom, which heterocyclic ring may optionally comprise as a ring member, one oxygen atom, and/or one additional nitrogen atom, and/or one carbon-carbon double bond, and/or one carbon-nitrogen bond; and which heterocyclic ring may optionally be substituted with trifluoromethyl, alkyl, hydroxyalkyl, or  $-NR'R''$ ; wherein  $R'$  and  $R''$  independently of each other are hydrogen or alkyl; or  $R^j$  and  $R^k$  together with the nitrogen to which they are attached form a 5- to 7-membered heterocyclic ring, which heterocyclic ring may optionally comprise as a ring member, one oxygen atom, and/or one additional nitrogen atom, and/or one carbon-carbon double bond, and/or one carbon-nitrogen bond; and which heterocyclic ring may optionally be substituted with trifluoromethyl, alkyl, hydroxy, hydroxyalkyl, or  $-NR'R''$ ; wherein  $R'$  and  $R''$  independently of each other are hydrogen or alkyl;

or  $R^7$  is a heteroaryl group which heteroaryl group is optionally substituted with one or more substituents independently selected from the group consisting of: halo, trifluoromethyl, trifluoromethoxy, cyano, nitro, alkyl, and alkoxy;

with the proviso that the compound is not

7-(3-Aminophenyl)-1-phenyl-5-trifluoromethylbenzimidazole,

7-(3-Pyridyl)-1-phenyl-5-trifluoromethylbenzimidazole,

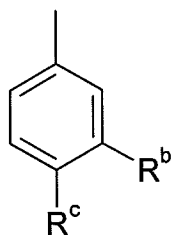
1,7-Diphenyl-5-trifluoromethylbenzimidazole,

7-benzoylamino-1-phenyl-5-trifluoromethylbenzimidazole, or

7-amino-1-phenyl-5-trifluoromethylbenzimidazole.

2. (original) The compound of claim 1, wherein  $R^5$  is selected from the group of methyl, tertbutyl, trifluoromethyl, hydroxymethyl, cyano, ethoxycarbonyl,  $-\text{CH}=\text{N}-\text{OH}$ , and  $-\text{CH}=\text{N}-\text{O}-\text{CH}_3$ .

3. (previously presented) The compound of claim 1, wherein  $R^7$  is



wherein one of  $R^b$  and  $R^c$  is hydrogen; and  
the other of  $R^b$  and  $R^c$  is

- hydrogen, halo, cyano, hydroxy, nitro, trifluoromethyl, trifluoromethoxy, alkyl, alkoxy, alkylcarbonyl or  $-\text{NR}^d-(\text{C}=\text{O})-\text{R}^e$ ; wherein the alkyl and alkoxy are optionally substituted with one or more substituents selected from the group consisting of: hydroxy, alkoxy, halo, and  $-\text{NR}'\text{R}''$ ;

- $-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ,  $-\text{alkyl}-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ,  $-(\text{C}=\text{O})-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ,  $-\text{O}-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ,  $-\text{O}-\text{alkyl}-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ,  $-\text{NR}^{\text{h}}-\text{alkyl}-\text{NR}^{\text{f}}\text{R}^{\text{g}}$ ;  
wherein  $\text{R}^{\text{d}}$ ,  $\text{R}^{\text{e}}$ ,  $\text{R}^{\text{f}}$ ,  $\text{R}^{\text{g}}$ ,  $\text{R}^{\text{h}}$ ,  $\text{R}'$  and  $\text{R}''$  are as defined in claim 1.

4. (previously presented) The chemical compound of claim 1, wherein  $\text{R}^7$  is 3,4-methylenedioxyphenyl.

5. (previously presented) The chemical compound of claim 1, wherein  $\text{R}^7$  is  $\text{R}^7$  is

- $-\text{NR}^{\text{h}}-(\text{C}=\text{O})-\text{R}^{\text{i}}$ ,  $-\text{N}=\text{CH}-\text{R}^{\text{i}}$ , or  $-\text{C}\equiv\text{C}-\text{R}^{\text{i}}$ ;

wherein  $\text{R}^{\text{h}}$  is hydrogen or alkyl; and  $\text{R}^{\text{i}}$  is alkyl or phenyl, which alkyl or phenyl is optionally substituted with hydroxy, trifluoromethyl, cyano or alkyl; or

- $-\text{NR}^{\text{j}}\text{R}^{\text{k}}$ ,  $-\text{alkyl}-\text{NR}^{\text{j}}\text{R}^{\text{k}}$ ,  $-\text{CH}=\text{CH}-(\text{C}=\text{O})-\text{NR}^{\text{j}}\text{R}^{\text{k}}$ ,  $-\text{CH}=\text{CH}-(\text{C}=\text{O})-\text{O}-\text{alkyl}$ ,  $-\text{alkyl}-(\text{C}=\text{O})-\text{NR}^{\text{j}}\text{R}^{\text{k}}$ , or  $-\text{C}\equiv\text{C}-\text{CH}_2-\text{NR}^{\text{j}}\text{R}^{\text{k}}$ ; wherein  $\text{R}^{\text{j}}$  and  $\text{R}^{\text{k}}$  independently of each other are selected from the group consisting of hydrogen, alkyl,  $-\text{alkyl}-\text{CN}$ ,  $-\text{alkyl}-\text{R}'\text{R}''$  and  $-\text{alkyl}-\text{R}^{\text{l}}$ ; wherein  $\text{R}'$  and  $\text{R}''$  independently of each other are hydrogen or alkyl;  $\text{R}^{\text{l}}$  is a 5- to 7-membered heterocyclic ring comprising one nitrogen atom, which heterocyclic ring may optionally comprise as a ring member, one oxygen atom, and/or one additional nitrogen atom, and/or one carbon-carbon double bond, and/or one carbon-nitrogen bond; and which heterocyclic ring may optionally be substituted with trifluoromethyl, alkyl, hydroxyalkyl, or  $-\text{NR}'\text{R}''$ ; wherein  $\text{R}'$  and  $\text{R}''$  independently of each other are hydrogen or alkyl; or  $\text{R}^{\text{j}}$  and  $\text{R}^{\text{k}}$  together with the nitrogen to which they are attached form a 5- to 7-membered heterocyclic ring, which heterocyclic ring may optionally comprise as a ring member, one oxygen atom, and/or one additional nitrogen atom, and/or one carbon-carbon double bond, and/or one carbon-nitrogen bond; and which heterocyclic ring may optionally be substituted with trifluoromethyl, alkyl, hydroxy, hydroxyalkyl, or  $-\text{NR}'\text{R}''$ ; wherein  $\text{R}'$  and  $\text{R}''$  independently of each other are hydrogen or alkyl.

6. (previously presented) The chemical compound of claim 1, wherein  $\text{R}^7$  is indolyl, pyridyl, or furyl, optionally substituted with halo or methyl.

7. (original) The compound of claim 1, which is

7-(3-Chlorophenyl)-1-phenyl-5-trifluoromethylbenzimidazole;

7-(3-Aminophenyl)-5-formyl-1-phenylbenzimidazole oxime;

O-Methyl 7-(3-Aminophenyl)-5-formyl-1-phenylbenzimidazole oxime;

7-(N-benzylideneamino)-1-phenyl-5-trifluoromethylbenzimidazole;

7-(N-(4-cyanobenzylidene)amino)-1-phenyl-5-trifluoromethylbenzimidazole;

7-(N-(3-cyanobenzylidene)amino)-1-phenyl-5-trifluoromethylbenzimidazole;

7-(3-Aminophenyl)-5-cyano-1-phenylbenzimidazole;

7-(3-(Hydroxymethyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;

1-Phenyl-7-(3-(1,2,3,6-tetrahydropyridine-1-ylmethyl)phenyl)-5-trifluoromethylbenzimidazole;

7-(3-Acetamidophenyl)-5-ethoxycarbonyl-1-phenylbenzimidazole;

7-(3-Aminophenyl)-5-ethoxycarbonyl-1-phenylbenzimidazole;

5-(Ethoxycarbonyl)-7-(3-(hydroxymethyl)phenyl)-1-phenylbenzimidazole;

7-(3-Cyanophenyl)-1-phenyl-5-trifluorophenylbenzimidazole;

5-Cyano-7-(3-nitrophenyl)-1-phenylbenzimidazole;

5-Cyano-7-(3-hydroxymethylphenyl)-1-phenylbenzimidazole;

5-Cyano-7-(3-((1-methylpiperazin-4-yl)methyl)phenyl)-1-phenylbenzimidazole;

5-Cyano-7-(3-(diethylaminomethyl)phenyl)-1-phenylbenzimidazole;

7-(3-Acetamidophenyl)-5-cyano-1-phenylbenzimidazole;

5-Cyano-7-(4-methoxyphenyl)-1-phenylbenzimidazole;

5-Cyano-7-(3-methoxyphenyl)-1-phenylbenzimidazole;

5-Cyano-7-(4-cyanophenyl)-1-phenylbenzimidazole;

5-Cyano-7-(3-fluorophenyl)-1-phenylbenzimidazole;

5-Cyano-7-(4-hydroxyphenyl)-1-phenylbenzimidazole;

5-Cyano-7-[3-(dimethylamino)phenyl]-1-phenylbenzimidazole;

5-Cyano-7-(3,4-methylenedioxyphenyl)-1-phenylbenzimidazole;

5-Cyano-7-(pyridin-4-yl)-1-phenylbenzimidazole;

7-(3-Aminophenyl)-5-hydroxymethyl-1-phenylbenzimidazole;

5-Ethoxycarbonyl-7-(3-((morpholin-4-yl)methyl)phenyl)-1-phenylbenzimidazole;

5-Ethoxycarbonyl-7-(3-((1-methylpiperazin-4-yl)methyl)phenyl)-1-phenylbenzimidazole;  
5-Ethoxycarbonyl-7-(3-((dimethylamino)methyl)phenyl)-1-phenylbenzimidazole;  
5-Cyano-7-(3-cyanophenyl)-1-phenylbenzimidazole;  
5-Cyano-7-(4-nitrophenyl)-1-phenylbenzimidazole;  
7-(4-Acetamidophenyl)-5-cyano-1-phenylbenzimidazole;  
7-(3-Acetamidophenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
O-Methyl 7-(3-acetamidophenyl)-5-formyl-1-phenylbenzimidazole oxime;  
O-Methyl 7-(3-(dimethylamino)phenyl)-5-formyl-1-phenylbenzimidazole oxime;  
5-Cyano-7-(4-diethylaminomethylphenyl)-1-phenylbenzimidazole;  
7-(4-Benzamidyl)-5-cyano-1-phenylbenzimidazole;  
7-(3-Acetamidophenyl)-5-hydroxymethyl-1-phenylbenzimidazole;  
7-(3-Ethylaminophenyl)-5-hydroxymethyl-1-phenylbenzimidazole;  
7-(3-Dimethylaminophenyl)-5-trifluoromethyl-1-phenylbenzimidazole;  
7-(3-Methylaminophenyl)-5-trifluoromethyl-1-phenylbenzimidazole;  
1-Phenyl-7-(3-((4-methylpiperazin-1-yl)methyl)phenyl)-5-trifluoromethylbenzimidazole;  
7-(3-(1-Morpholinylmethyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-((Dimethylamino)methyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
5-Cyano-7-(4-(2-(4-morpholino)ethoxy)phenyl)-1-phenylbenzimidazole;  
7-(3-(N-Methyl acetamido)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
1-Phenyl-7-(4-pyridyl)-5-trifluoromethylbenzimidazole;  
5-(Hydroxymethyl)-1-phenyl-7-(3-trifluoromethoxyphenyl)benzimidazole;  
7-(4-pyridyl N-oxide)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-chloro-4-pyridyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-chloro-4-pyridyl-N-oxide)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-Acetylphenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-Fluorophenyl)-1-phenyl-5-trifluorophenylbenzimidazole;  
3-(3-Phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylic acid methyl ester;  
3-(6-Cyano-3-phenyl-3*H*-benzimidazol-4-yl)acrylic acid methyl ester;  
7-(4-Morpholinyl)-1-phenyl-5-trifluoromethylbenzimidazole;

5-*t*-Butyl-7-(3-dimethylaminophenyl)-1-phenylbenzimidazole;  
7-(3-(1-Methoxyethyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(1-Methyl-5-indolyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-(1-Hydroxyethyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-Furyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
*N,N*-Diethyl-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;  
1-(4-Methylpiperazin-1-yl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)prop-2-en-1-one;  
3-(3-Phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)-1-piperidinylprop-2-en-1-one;  
1-(4-Morpholinyl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)prop-2-en-1-one;  
1-(4-Methyl-[1,4]-hexahydrodiazepin-1-yl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)prop-2-en-1-one;  
*N*-(2-Cyanoethyl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;  
3-(3-Phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)-*N*-propylacrylamide;  
*N*-(2-Dimethylaminoethyl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;  
3-(3-Phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)-1-(4-trifluoromethyl-piperidin-1-yl)prop-2-en-1-one;  
7-(3-(2-Hydroxy-2-propyl)phenyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(4-Hydroxypiperidinyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-Fluorophenyl)-5-methyl-1-phenylbenzimidazole;  
7-(4-Hydroxybut-1-ynyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(1-(1-(4-Hydroxyethylpiperazinyl)ethyl)-1-methylamino)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(1-(1-(4-Methylpiperazinyl)ethyl)-1-methyl)amino-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(3-(4-Morpholino)prop-1-ynyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
*N,N*-Diethyl-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)propionamide;  
3-(6-*tert*-Butyl-3-phenyl-3*H*-benzimidazol-4-yl)-1-(piperidin-1-yl)prop-2-en-1-one;  
*N*-Ethyl-*N*-isopropyl-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;

*N*-(1-Methylpiperidin-4-yl)methyl-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)-acrylamide;  
*N*-Methyl-*N*-(1-methylpyrrolidin-3-yl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;  
3-(6-*tert*-Butyl-3-phenyl-3*H*-benzimidazol-4-yl)-*N*-methyl-*N*-(1-methylpiperidin-4-yl)-acrylamide;  
7-(4-(Diethylamino)butyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
7-(4-((*N*-(2-Cyanoethyl)-*N*-methyl)amino)-1-butyl)-1-phenyl-5-trifluoromethylbenzimidazole;  
3-(3-Phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)-1-(pyrrolidin-1-yl)prop-2-en-1-one;  
1-(2,5-Dihydropyrrol-1-yl)-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)prop-2-en-1-one;  
*N*-(2-Cyanoethyl)-*N*-methyl-3-(3-phenyl-6-trifluoromethyl-3*H*-benzimidazol-4-yl)acrylamide;  
1-Phenyl-7-(3-(1-(1,2,3,6-tetrahydropyridinyl))prop-1-ynyl)-5-trifluoromethylbenzimidazole;  
1-Phenyl-7-(3-(1-piperidinyl)prop-1-ynyl)-5-trifluoromethylbenzimidazole;  
7-[1-(3-Dimethylamino)pyrrolidinyl]-1-phenyl-5-trifluoromethylbenzimidazole;  
or an *N*-oxide thereof, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof.

8. (previously presented) A pharmaceutical composition, comprising a therapeutically effective amount of a compound of claim 1, or the compound  
7-(3-Aminophenyl)-1-phenyl-5-trifluoromethylbenzimidazole,  
7-(3-Pyridyl)-1-phenyl-5-trifluoromethylbenzimidazole,  
1,7-Diphenyl-5-trifluoromethylbenzimidazole,  
7-benzoylamino-1-phenyl-5-trifluoromethylbenzimidazole, or  
7-amino-1-phenyl-5-trifluoromethylbenzimidazole,  
or an *N*-oxide thereof, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof, together with at least one pharmaceutically acceptable carrier, excipient or diluent.



Application No.: 10/575,380

Docket No.: 2815-0249PUS2

9. (cancelled).

10. (cancelled).

11. (cancelled).

12. (cancelled).

13. (cancelled).